

CLAIM LISTING

1. (Original) A packet based terminal device addressing system for enabling a calling party using a circuit based terminal device, which is addressable via a telephone number, to initiate a communication connection to a called party who is using a packet-based terminal device, which is addressable via an IP address, comprising:

means for storing data in a memory indicative of a correspondence between at least one IP address assigned to a called party's packet-based terminal device and a telephone number assigned to said called party's circuit-based terminal device;

means, responsive to receipt of data from said calling party indicative of said called party's telephone number corresponding to said called party's circuit-based terminal device, for retrieving data from said memory indicative of said IP address assigned to a called party's packet-based terminal device; and

means for establishing a communication connection between said calling party's circuit-based terminal device to said called party's packet-based terminal device.

2. (Original) The packet based terminal device addressing system of claim 1 wherein said means for establishing comprises:

means for transmitting said IP address assigned to said called party's packet-based terminal device to at least one packet-based communication service to locate said called party's packet-based terminal device.

3. (Original) The packet based terminal device addressing system of claim 2 wherein said means for establishing further comprises:

means, responsive to receipt of a message from one of said at least one packet-based communication services indicative of a presence of said called party's packet-based terminal device on said one of said at least one packet-based communication services, for extending a communication connection from said calling party's circuit-based terminal device to said one of said at least one packet-based communication services.

4. (Original) The packet based terminal device addressing system of claim 1 wherein said means for storing comprises:

means for storing a set of data comprising data indicative of an IP address assigned to each of a plurality of a called party's packet-based terminal devices.

5. (Original) The packet based terminal device addressing system of claim 4 wherein said means for retrieving comprises:

means for providing said calling party with a list of said called party's packet-based terminal devices; and

means, responsive to said calling party selecting a one of said called party's packet-based terminal devices, for identifying a packet-based communication service serving said called party's packet-based terminal device.

6. (Original) A method of operating a packet based terminal device addressing system for enabling a calling party using a circuit based terminal device, which is addressable via a telephone number, to initiate a communication connection to a called party who is using a packet-based terminal device, which is addressable via an IP address, comprising the steps of:

storing data in a memory indicative of a correspondence between at least one IP address assigned to a called party's packet-based terminal device and a telephone number assigned to said called party's circuit-based terminal device;

retrieving, in response to receipt of data from said calling party indicative of said called party's telephone number corresponding to said called party's circuit-based terminal device, data from said memory indicative of said IP address assigned to a called party's packet-based terminal device; and

establishing a communication connection between said calling party's circuit-based terminal device to said called party's packet-based terminal device.

7. (Original) The method of operating a packet based terminal device

addressing system of claim 6 wherein said step of establishing comprises:

transmitting said IP address assigned to said called party's packet-based terminal device to at least one packet-based communication service to locate said called party's packet-based terminal device.

8. (Original) The method of operating a packet based terminal device addressing system of claim 7 wherein said step of establishing further comprises:

extending, in response to receipt of a message from one of said at least one packet-based communication services indicative of a presence of said called party's packet-based terminal device on said one of said at least one packet-based communication services, a communication connection from said calling party's circuit-based terminal device to said one of said at least one packet-based communication services.

9. (Original) The method of operating a packet based terminal device addressing system of claim 6 wherein said step of storing in a memory comprises:

storing a set of data comprising data indicative of an IP address assigned to each of a plurality of a called party's packet-based terminal devices.

10. (Original) The method of operating a packet based terminal device addressing system of claim 9 wherein said step of retrieving comprises:

providing said calling party with a list of said called party's packet-based terminal devices; and

identifying, in response to said calling party selecting a one of said called party's packet-based terminal devices, a packet-based communication service serving said called party's packet-based terminal device.

11. (Original) A packet based terminal device addressing system for enabling a calling party using a circuit based terminal device, which is addressable via a telephone number, to initiate a communication connection to a called party who is using a packet-

based terminal device, which is addressable via an IP address, comprising:

data storage means for storing data in a memory indicative of a correspondence between at least one IP address assigned to a called party's packet-based terminal device and a telephone number assigned to said called party's circuit-based terminal device;

terminal device location means, responsive to receipt of data from said calling party indicative of said called party's telephone number corresponding to said called party's circuit-based terminal device, for retrieving data from said memory indicative of said IP address assigned to a called party's packet-based terminal device; and

communication connection means for establishing a communication connection between said calling party's circuit-based terminal device to said called party's packet-based terminal device.

12. (Original) The packet based terminal device addressing system of claim 11 wherein said communication connection means comprises:

terminal device locator means for transmitting said IP address assigned to said called party's packet-based terminal device to at least one packet-based communication service to locate said called party's packet-based terminal device.

13. (Original) The packet based terminal device addressing system of claim 12 wherein said communication connection means further comprises:

inquiry response means, responsive to receipt of a message from one of said at least one packet-based communication services indicative of a presence of said called party's packet-based terminal device on said one of said at least one packet-based communication services, for extending a communication connection from said calling party's circuit-based terminal device to said one of said at least one packet-based communication services.

14. (Original) The packet based terminal device addressing system of claim 11 wherein said data storage means comprises:

directory means for storing a set of data comprising data indicative of an IP address assigned to each of a plurality of a called party's packet-based terminal devices.

15. (Original) The packet based terminal device addressing system of claim 14 wherein said terminal device location means comprises:

destination selection means for providing said calling party with a list of said called party's packet-based terminal devices; and

service identification means, responsive to said calling party selecting a one of said called party's packet-based terminal devices, for identifying a packet-based communication service serving said called party's packet-based terminal device.